Reclamation Surety Estimate

OCT 27 1998

Autumn Gold

Draft estimates from Lon Thomas for Cotton Thom

Insert details of Veolemant on GAS & MINING

Mine Name

Doze first three feet of dump up hill to cover quarry floor and quarry face. Doze cure off dump downhill to recontour and blend in with hill. Spread topsoil with front end loader, seed, then take with loader teeth.

Amount of disturbed area which will receive reclamation treatments = Estimated total disturbed area for this mine =

DIV. OF OIL, GAS & MANING

Activity	Qty	Unit	\$/Unit	\$
Safety Gates, signs, etc		sum	200	0
				9
Demolition of buildings & facilities	0	CF	0.23	0
Debris & equipment removal - trucking	0	trips	48	0
Debris & equipment removal - dump fees	0	CY	6	0
Debris & equipment removal - loading trucks w/FE loader	0	hours	166	0
Demolition & debris removal - general labor	0	hours	15	0
Regrading facilities areas	0	acre	415	0
Regrading waste dump slopes	7000	CY	0.32	2,240
Ripping waste dump tops	7.6	acre	363	2,759
Ripping stockpile & compacted areas	0	acre	363	0
Ripping pit floors	0	acre	363	0
Ripping pit access roads	-0	acre	363	0
Creating safety berms or barriers around highwalls	0	LF	0.1	0
Ripping access roads - dozer	0	acre	363	0
Regrading access roads - dozer	0	acre	415	0
Sidecast mtl replacement on steep roads - trackhoe	0	LF	0.85	0
Surface drainage restoration of construction	0	LF	0.1	0
Topsoil replacement - dozer	0	CY	0.4	0
Topsoil replacement - scraper	0	CY	1.01	0
Topsoil replacement - truck & FE loader	684	CY	1.99	1,361
Mulching (2 ton/acre alfalfa)	0	acre	160	0
Fertilizing (100lb/acre diammonium phosphate)	7.6	acre	90	684
Broadcast seeding (~20 lb/acre)	7.6	acre	170	1,292
Drill seeding (~13 lb/acre)	0	acre	150	0
Hydroseeding	0	acre	800	0
General site cleanup & trash removal	7.6	acre	50	380
Equipment mobilization	33%	equip	1000	330
Reclamation Supervision	2	days	356	712
	Subtotal			9,758
10% Contingency				976
Facility for F	Subtotal			10,734
Escalate for 5 years at 2.24% per yr				1,202
	Total			11,936



#### Reclamation Surety Estimate



#### Mine Name

#### Antique White

#### Insert details of reclamation here

Doze first three feet of dump up hill to cover quarry floor and quarry face. Doze curb off dump downhill to recontour and blend in with hill. Spread topsoil with front end loader, seed, then rake with loader teeth.

Amount of disturbed area which will receive reclamation treatments = 1.29
Estimated total disturbed area for this mine = 1.29

Activity	Qty	Unit	\$/Unit	\$
Safety Gates, signs, etc		sum	200	0
Demolition of buildings & facilities	0	CF	0.23	0
Debris & equipment removal - trucking	0	trips	48	0
Debris & equipment removal - dump fees	0	CY	6	0
Debris & equipment removal - loading trucks w/FE loader	0	hours	166	0
Demolition & debris removal - general labor	0	hours	15	0
Regrading facilities areas	0	acre	415	0
Regrading waste dump slopes	233	CY	0.32	75
Ripping waste dump tops	1	acre	363	363
			363	0
Ripping stockpile & compacted areas	0	acre	303	0
Ripping pit floors	0	acre	363	0
Ripping pit access roads	0	acre	363	0
Creating safety berms or barriers around highwalls	0	LF	0.1	0
Ripping access roads - dozer	0	acre	363	0
Regrading access roads - dozer	0	acre	415	C
Sidecast mtl replacement on steep roads - trackhoe	0	LF	0.85	C
Surface drainage restoration of construction	0	LF	0.1	C
Topsoil replacement - dozer	0	CY	0.4	0
Topsoil replacement - scraper	ol	CY	1.01	0
Topsoil replacement - truck & FE loader	120	CY	1.99	239
Adulation (O Anni Innovation)	0	aere	160	(
Mulching (2 ton/acre alfalfa)	1.3	acre	90	117
Fertilizing (100lb/acre diammonium phosphate)	1.3	acre	170	221
Broadcast seeding (~20 lb/acre)	0	acre	150	(
Drill seeding (~13 lb/acre) Hydroseeding	0	acre	800	(
Tryaresouring				
General site cleanup & trash removal	1.3	acre	50	65
Equipment mobilization	33%	equip	1000	330
Reclamation Supervision	1	days	356	356
The state of the s	Subtotal			1,76
10% Contingency				177
	Subtotal			1,942
Escalate for 5 years at 2.24% per yr				217
	Total			2,159





### **Reclamation Surety Estimate**

#### Mine Name

## Aspen Frost

# Insert details of reclamation here

Doze first three feet of dump up hill to cover quarry floor and quarry face. Doze curb off dump downhill to recontour and blend in with hill. Spread topsoil with front end loader, seed, then rake with loader teeth.

Amount of disturbed area which will receive reclamation treatments = Estimated total disturbed area for this mine =

2.10

2.10

Activity	Qty	Unit	\$/Unit	\$
Safety Gates, signs, etc		sum	200	0
Demolition of buildings & facilities	0	CF	0.23	0
Debris & equipment removal - trucking	0	trips	48	0
Debris & equipment removal - dump fees	0	CY	6	0
Debris & equipment removal - loading trucks w/FE loader	0	hours	166	0
Demolition & debris removal - general labor	0	hours	15	0
Regrading facilities areas	0	acre	415	0
Regrading waste dump slopes	340	CY	0.32	109
Ripping waste dump tops	2.1	acre	363	762
Appling Watto Camp to pa				
Ripping stockpile & compacted areas	0	acre	363	0
Ripping pit floors	0	acre	363	0
Ripping pit access roads	0	acre	363	0
Creating safety berms or barriers around highwalls	0	LF	0.1	0
Ripping access roads - dozer	0	acre	363	0
Regrading access roads - dozer	0	acre	415	0
Sidecast mtl replacement on steep roads - trackhoe	0	LF	0.85	0
Surface drainage restoration of construction	0	LF	0.1	0
Topsoil replacement - dozer	0	CY	0.4	0
Topsoil replacement - scraper	0	CY	1.01	0
Topsoil replacement - truck & FE loader	189	CY	1.99	376
Mulching (2 ton/acre alfalfa)	0	acre	160	0
Fertilizing (100lb/acre diammonium phosphate)	2.1	acre	90	189
Broadcast seeding (~20 lb/acre)	2.1	acre	170	357
Drill seeding (~13 lb/acre)	0	acre	150	
Hydroseeding	0	acre	800	
General site cleanup & trash removal	2.1	acre	50	105
	33%	equip	1000	330
Equipment mobilization	33%	equip	1000	001
Reclamation Supervision	1	days	356	356
	Subtotal			2,584 258
10% Contingency	Out total		+	2,84
	Subtotal		+	318
Escalate for 5 years at 2.24% per yr	Total		-	3,16